

## Forest Health Protection Pacific Southwest Region



Date: June 9, 2009 File Code: 3420

To: Patricia Grantham, Forest Supervisor, Klamath National Forest

Subject: Biological Evaluation of Middle Creek Thinning Project – Salmon/Scott

River Ranger District (FHP Report No. N09-06)

On May 18-21, 2009, Cynthia Snyder (Entomologist) and Pete Angwin (Plant Pathologist), Forest Health Protection, visited the Klamath National Forest to review past, current and future thinning projects requesting FHP funding with Roger Siemers (Klamath National Forest SO).

On May 20, we were joined by Dave Burgess (Salmon/Scott River Ranger Districts) to look at the Middle Creek Precommercial Thin (PCT) project which will be submitted for 2010 FHP Prevention/Suppression funding. Observations and recommendations are as follows:

## Background

The Klamath NF wants to accomplish 375-450 acres of precommercial thinning, hand piling and burning on matrix land. We visited the area on May 20, and saw plantation units 529-2, 6, 7, 15, and 85 (Figures 1 and 2). Located in the Middle Creek drainage, the project area is covered by the Deep Creek and Great Scott NEPAs. All plantations are post timber harvest with no record of fire history given. Plantations range from 24-62 years old. The trees are primarily precommercial-sized ponderosa pine with lesser amounts of Douglas-fir, incense cedar, white fir, sugar pine, Jeffrey pine, black oak, live oak and madrone. Stocking densities range from 150-2,400 trees per acre with the majority of the trees occupying the codominant crown class, creating a closed canopy.

## **Observations**

The stands are becoming very dense, and the risk to attack by western and mountain pine beetle (*Dendroctonus brevicomis* and *Dendroctonus ponderosae*, respectively) is increasing. The risk to crown fire and mortality from drought is likewise increasing. In addition, small amounts of western dwarf mistletoe (*Arceuthobium campylopodum*) were also noted in the ponderosa pine in Stand 529-2 and 85, Douglas-fir dwarf mistletoe (*Arceuthobium douglasii*) and incense cedar rust (*Gymnosporangium libocedri*) in stand

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529-19, sequoia pitch moth (*Synanthedon sequoiae*) in Jeffrey pine in stand 529-85, white pine blister rust (*Cronartium ribicola*) on sugar pine and elytroderma (*Elytroderma deformans*) in ponderosa pine in 529-15, and a possible annosus root disease find in stand 529-15 several years ago.

To address this problem, the District plans to precommercially hand thin the plantations, leaving only the healthiest, most vigorous, defect-free trees. In some plantations, mastication may be used to remove brush and precommercial-sized trees. Trees infected with dwarf mistletoe will be removed, while healthy Douglas-fir, white fir, sugar pine, incense cedar and hardwoods will be retained to enhance vegetative species diversity. Stocking levels will be reduced to 75 to 100 trees per acre (20-30 foot spacing) and fuels will be hand piled and burned.



Figure 1. Overstocked ponderosa pine plantation (unit 529-6) at Middle Creek PCT.



Figure 1. Overstocked ponderosa pine plantation (unit 529-2) at Middle Creek PCT.

## Summary

The Middle Creek PCT project, if fully implemented, will be effective in addressing concerns regarding bark beetles, fire and drought, while producing more diverse and resilient stand structure and enhancing wildlife and timber values. The proposed thinning will also meet the Regional Forester's density management policy that high risk density levels will not be reached again for at least 20 years.

The Scott/Salmon River Ranger Districts and Klamath National Forest have an excellent record of accomplishment in the planning and timely implementation of similar thinning treatments. I support the Middle Creek PCT project for funding consideration in FY2010.

If you have any questions regarding this report and/or need additional information please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

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